

Abstract

To provide a speaker array apparatus and a method for setting audio beams in a speaker array apparatus, in which the degree of freedom in the place where the speaker array apparatus is installed is high, and a user can set audio beams easily. A speaker array apparatus 1 sweeps a range of from 0 degree to 180 degrees in front of a speaker array 10 with audio beams based on an audio signal limited to a band where the angles of the audio beams can be adjusted. The speaker array apparatus 1 collects direct sounds or reflected sounds of the audio beams through a nondirectional microphone 2. The speaker array apparatus 1 analyzes the collected audio data, detects peaks not lower than a threshold value, and checks symmetry among the peaks. When there is a symmetry, the angles where the peaks were detected are set as angles with which audio beams of respective channels of a surround-sound should be output. Thus, outgoing angles of the audio beams can be set in optimum positions in accordance with the shape of a room or the installation position where the speaker array apparatus is installed.